Fig.1

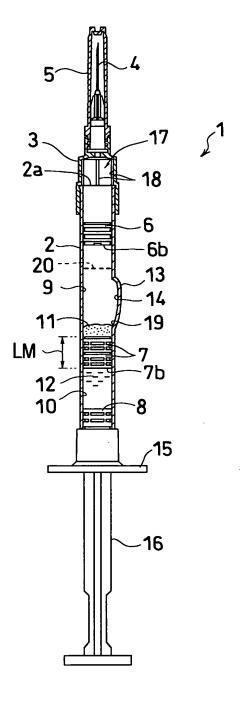


Fig.2

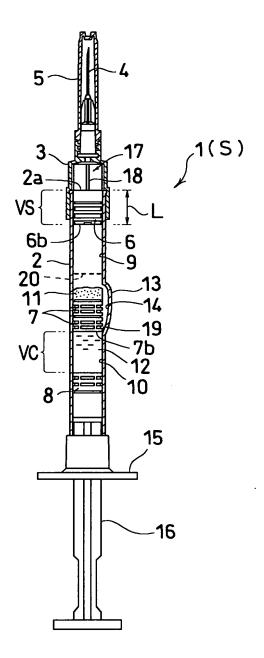
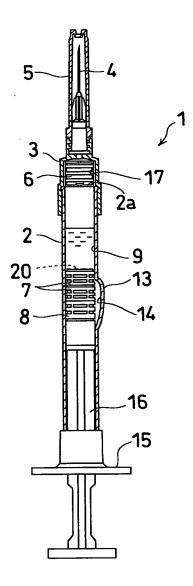


Fig.3



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COMPARISON TABLE 1 : SHOWING BEHAVIOR OF SECOND COMPONENT WHEN CHANGING

Fig. 4

POSITION FOR ATTACHING FRONT PLUG MEMBER

												 i	
SHING-OUT	MOVING SPEED OF END PLUG MEMBER	20mm/sec		0	©	×	0	0	×	0	0	×	
LIQUID SPLASHING-OUT PHENOMENON MOVING SPEED OF END DI 113 MEMBER		7mm/sec		0	0	0	0	©	0	0	0	0	
VOLUME RATIO		79	102	31	63	94	39	93	112	6			
ANSFER		VOLUME OF SECOND COMPONENT	(mL)	1.10	1.10	1.10	1.10	1.10	1.10	1.65	1.65	1.65	
OF LIQUID TR	BEGINNING STATE OF LIQUID TRANSFER	REFERENCE VOLUME	(mL)	0.87	1.13	0.35	69.0	1.04	0.43	1.54	1.85	0.15	
BECINNING STATE		DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG	MEMBER (mm)	10	13	4	∞	. 12	S	10	12	-	
DISTANCE TO NG STATE OF TRANSFER	TRANSFER	FRONT PLUG MEMBER	(mm)	12	14	13	14	15	12	12	15	16	
MOVING DIS	LIQUID T	END PLUG MEMBER	(mm)	17	17	17	17	17	17	20	20	20	
STATE BEFORE PREPARING	OPERATION FOR ADMINISTRATION	DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG	MEMBER (mm)	22	. 27	17	22	27	17	22	27	17	
RCAL Y	LENGTH	(mm)	95	95	92	06	06	06	106	106	106		
CYLINDRICAL	ВОБУ	INNER LENGTH	(mm)	10.5	10.5	10.5	10.5	10.5	10.5	14.0	14.0	14.0	
				EXAMPLE 1	EXAMPLE 2	COMPARISON EXAMPI F 1	EXAMPLE 3	EXAMPLE 4	COMPARISON EXAMPI F 2	EXAMPLE 5	EXAMPLE 6	COMPARISON EXAMPLE 3) X

EXPLANATION OF SYMBOLS

%

AT LEAST 30% 10% © : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT O : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT × : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT

COMPARISON TABLE 2: SHOWING BEHAVIOR OF SECOND COMPONENT WHEN CHANGING POSITION WHERE

BYPASS IS FORMED AND ENTIRE LENGTH OF MIDDLE PLUG MEMBER

	LIQUID BEGINNING STATE OF LIQUID TRANSFER SPLASHING-OUT PHENOMENON	REFERENCE SECOND VOLUME	COMPONENT	(mL) (mL) (96)	0.69 1.10 63 © O	1.13 1.10 102 © ©	1.13 1.10 102 © ©	
	BEGINNING STA		BODY AND REAR END OF FRONT PLUG MEMBER	(mm)	0 8	13	13	ч
	MOVING DIATANCE TO BEGINNING STATE OF LIQUID TRANSFER	FRONT	(mm)	14	σ	4	ç	
			A DEPTH OF THE PERTH OF THE PER	(mm)	17	12	10	,
	MIDDLE PREPARING PLUG OPERATION FOR ADMINISTRATION	DISTANCE BETWEEN LEADING END OF CYLINDRICAL	BODY AND REAR END OF FRONT PLUG MEMBER	(mm)	22	22	17	17
	MIDDLE PLUG MEMBER	MIDDLE PLUG MEMBER ENTIRE			12.0	10.5	9.0	100
	POSITION WHERE BYPASS IS FORMED	DISTANCE BETWEEN REAR END REAR END PORTION AND ENTIRE DIAMETER LENGTH	OF OF CYLINDRICAL PORY	(mm)	49	52	54	49
	INDRICAL BODY	LENGTH		(mm)	06	06	06	G
	CYLINDRICAL BODY	INNER		(mm)	10.5	10.5	10.5	105
					EXAMPLE 3	EXAMPLE 7	EXAMPLE 8	COMPARISON

EXPLANATION OF SYMBOLS

© : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 0%
O : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 10%
x : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT AT LEAST 30%

Fig.6

